

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/652,928A  
Source: IFW/6  
Date Processed by STIC: 2/16/07

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 02/16/2007

PATENT APPLICATION: US/10/652,928A

TIME: 15:37:02

Input Set : E:\FINAL Revised Sequence listing.txt

Output Set: N:\CRF4\02162007\J652928A.raw

4 <110> APPLICANT: Chiaur, D.  
 5 Pagano, M.  
 6 Latres, E.  
 8 <120> TITLE OF INVENTION: METHODS TO IDENTIFY COMPOUNDS USEFUL FOR THE TREATMENT  
 9 OF PROLIFERATIVE AND DIFFERENTIATIVE DISORDERS  
 W--> 10 <130> FILE REFERENCE: 5914-099-999  
 12 <140> CURRENT APPLICATION NUMBER: US/10/652,928A  
 13 <141> CURRENT FILING DATE: 2003-08-28  
 15 <150> PRIOR APPLICATION NUMBER: US/09/385,219A  
 16 <151> PRIOR FILING DATE: 1999-08-27  
 18 <150> PRIOR APPLICATION NUMBER: 60/098,355  
 19 <151> PRIOR FILING DATE: 1998-08-28  
 21 <150> PRIOR APPLICATION NUMBER: 60/118,568  
 22 <151> PRIOR FILING DATE: 1999-02-03  
 24 <150> PRIOR APPLICATION NUMBER: 60/124,449  
 25 <151> PRIOR FILING DATE: 1999-03-15  
 27 <160> NUMBER OF SEQ ID NOS: 100  
 29 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 31 <210> SEQ ID NO: 1  
 32 <211> LENGTH: 2151  
 33 <212> TYPE: DNA  
 34 <213> ORGANISM: Homo sapiens  
 36 <220> FEATURE:  
 37 <223> OTHER INFORMATION: Nucleotide sequence of human F-box protein FBP1/Beta-TRCP1  
 39 <400> SEQUENCE: 1  
 40 tgcgttggct gcggcctggc accaaagggg cggcccccggc ggagagcgga cccagtggcc 60  
 41 tcggcgatta tggacccggc cgaggcggtg ctgcaagaga aggcactcaa gtttatgaat 120  
 42 tcctcagaga gagaagactg taataatggc gaaccccccta ggaagataat accagagaag 180  
 43 aattcactta gacagacata caacagctgt gccagactct gcttaaacca agaaacagta 240  
 44 tgttttagcaa gcactgctat gaagactgag aattgtgtgg ccaaaacaaa acttgccaat 300  
 45 ggcacttcca gtatgattgt gccaagcaa cggaaactct cagcaagcta tgaaaaggaa 360  
 46 aaggaactgt gtgtcaaata ctttgagcag tggtcagagt cagatcaagt ggaatttgtg 420  
 47 gaacatctta tatcccaaat gtgtcattac caacatgggc acataaactc gtatcttaaa 480  
 48 cctatgttgc agagagattt cataactgct ctgccagctc ggggattgga tcatatcgct 540  
 49 gagaacattc tgtcatacct ggatgccaaa tcactatgtg ctgctgaact tgtgtgcaag 600  
 50 gaatggtacc gagtgacctc tgatggcatg ctgtggaaga agcttatcga gagaatggtc 660  
 51 aggacagatt ctctgtggag aggcctggca gaacgaagag gatggggaca gtatttatc 720  
 52 aaaaacaaac ctctgacgg gaatgtcctt cccaactctt tttatagagc actttatcct 780  
 53 aaaattatac aagacattga gacaatagaa tctaattgga gatgtggaag acatagttaa 840  
 54 cagagaattc actgccgaag tgaaacaagc aaaggagttt actgtttaca gtatgatgat 900  
 55 cagaaaatag taagcggcct tcgagacaac acaatcaaga tctgggataa aaacacattg 960  
 56 gaatgcaagc gaattctcac aggccatata ggttcagtc tctgtctcca gtatgatgat 1020  
 57 agagtgatca taacaggatc atcggattcc acggtcagag tgtgggatgt aaatacaggt 1080

(pg. 6)

## RAW SEQUENCE LISTING

DATE: 02/16/2007

PATENT APPLICATION: US/10/652,928A

TIME: 15:37:02

Input Set : E:\FINAL Revised Sequence listing.txt

Output Set: N:\CRF4\02162007\J652928A.raw

```

58 gaaatgctaa acacgttgat tcaccattgt gaagcagttc tgcacttgcg tttcaataat 1140
59 ggcacgatgg tgacctgctc caaagatcgt tccattgctg tatgggatat ggcctcccca 1200
60 actgacatta ccctccggag ggtgctggtc ggacaccgag ctgctgtcaa tgtttagac 1260
61 tttgatgaca agtacattgt ttctgcatct ggggatagaa ctataaagg atggaacaca 1320
62 agtacttggt aatttgaag gaccttaa atggacacaa gaggcattgc ctgtttgcag 1380
63 tacagggaca ggctggtagt gaggggctca tctgacaaca ctatcagatt atgggacata 1440
64 gaatgtggtg catgtttacg agtggttaga ggccatgagg aattggtgcg ttgtattcga 1500
65 tttgataaca agaggatagt cagtggggcc tatgatggaa aaattaaagt gtgggatctt 1560
66 gtggctgctt tggacccccg tgctcctgca gggacactct gtctacggac ccttggtggag 1620
67 cattccggaa gagtttttctg actacagttt gatgaattcc agattgtcag tagttcacat 1680
68 gatgacacaa tcctcatctg ggacttccta aatgatccag ctgcccgaagc tgaaccccc 1740
69 cgttccccct ctcgaacata cacctacatc tccagataaa taaccataca ctgacctcat 1800
70 acttgcccag gacccattaa agttgcggta tttaacgtat ctgccaatac caggatgagc 1860
71 aacaacagta acaatcaaac tactgcccag tttccctgga ctagccgagg agcagggctt 1920
72 tgagactcct gttgggacac agttggtctg cagtcggccc aggacggtct actcagcaca 1980
73 actgactgct tcagtgtctg tatcagaaga tgtcttctat caattgtgaa tgattggaac 2040
74 ttttaaacct cccctcctct cctcctttca cctctgcacc tagtttttcc ccattggttc 2100
75 cagacaaagg tgacttataa atatatttag tgttttgcca gaaaaaaaaa a 2151
77 <210> SEQ ID NO: 2
78 <211> LENGTH: 569
79 <212> TYPE: PRT
80 <213> ORGANISM: Homo sapiens
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Amino Acid sequence of human F-box protein FBP1/Beta-TRCP1
85 <400> SEQUENCE: 2
86 Met Asp Pro Ala Glu Ala Val Leu Gln Glu Lys Ala Leu Lys Phe Met
87 1 5 10 15
88 Asn Ser Ser Glu Arg Glu Asp Cys Asn Asn Gly Glu Pro Pro Arg Lys
89 20 25 30
90 Ile Ile Pro Glu Lys Asn Ser Leu Arg Gln Thr Tyr Asn Ser Cys Ala
91 35 40 45
92 Arg Leu Cys Leu Asn Gln Glu Thr Val Cys Leu Ala Ser Thr Ala Met
93 50 55 60
94 Lys Thr Glu Asn Cys Val Ala Lys Thr Lys Leu Ala Asn Gly Thr Ser
95 65 70 75 80
96 Ser Met Ile Val Pro Lys Gln Arg Lys Leu Ser Ala Ser Tyr Glu Lys
97 85 90 95
98 Glu Lys Glu Leu Cys Val Lys Tyr Phe Glu Gln Trp Ser Glu Ser Asp
99 100 105 110
100 Gln Val Glu Phe Val Glu His Leu Ile Ser Gln Met Cys His Tyr Gln
101 115 120 125
102 His Gly His Ile Asn Ser Tyr Leu Lys Pro Met Leu Gln Arg Asp Phe
103 130 135 140
104 Ile Thr Ala Leu Pro Ala Arg Gly Leu Asp His Ile Ala Glu Asn Ile
105 145 150 155 160
106 Leu Ser Tyr Leu Asp Ala Lys Ser Leu Cys Ala Ala Glu Leu Val Cys
107 165 170 175
108 Lys Glu Trp Tyr Arg Val Thr Ser Asp Gly Met Leu Trp Lys Lys Leu
109 180 185 190

```

## RAW SEQUENCE LISTING

DATE: 02/16/2007

PATENT APPLICATION: US/10/652,928A

TIME: 15:37:02

Input Set : E:\FINAL Revised Sequence listing.txt

Output Set: N:\CRF4\02162007\J652928A.raw

```

110 Ile Glu Arg Met Val Arg Thr Asp Ser Leu Trp Arg Gly Leu Ala Glu
111      195      200      205
112 Arg Arg Gly Trp Gly Gln Tyr Leu Phe Lys Asn Lys Pro Pro Asp Gly
113      210      215      220
114 Asn Ala Pro Pro Asn Ser Phe Tyr Arg Ala Leu Tyr Pro Lys Ile Ile
115 225      230      235      240
116 Gln Asp Ile Glu Thr Ile Glu Ser Asn Trp Arg Cys Gly Arg His Ser
117      245      250      255
118 Leu Gln Arg Ile His Cys Arg Ser Glu Thr Ser Lys Gly Val Tyr Cys
119      260      265      270
120 Leu Gln Tyr Asp Asp Gln Lys Ile Val Ser Gly Leu Arg Asp Asn Thr
121      275      280      285
122 Ile Lys Ile Trp Asp Lys Asn Thr Leu Glu Cys Lys Arg Ile Leu Thr
123      290      295      300
124 Gly His Thr Gly Ser Val Leu Cys Leu Gln Tyr Asp Glu Arg Val Ile
125 305      310      315      320
126 Ile Thr Gly Ser Ser Asp Ser Thr Val Arg Val Trp Asp Val Asn Thr
127      325      330      335
128 Gly Glu Met Leu Asn Thr Leu Ile His His Cys Glu Ala Val Leu His
129      340      345      350
130 Leu Arg Phe Asn Asn Gly Met Met Val Thr Cys Ser Lys Asp Arg Ser
131      355      360      365
132 Ile Ala Val Trp Asp Met Ala Ser Pro Thr Asp Ile Thr Leu Arg Arg
133      370      375      380
134 Val Leu Val Gly His Arg Ala Ala Val Asn Val Val Asp Phe Asp Asp
135 385      390      395      400
136 Lys Tyr Ile Val Ser Ala Ser Gly Asp Arg Thr Ile Lys Val Trp Asn
137      405      410      415
138 Thr Ser Thr Cys Glu Phe Val Arg Thr Leu Asn Gly His Lys Arg Gly
139      420      425      430
140 Ile Ala Cys Leu Gln Tyr Arg Asp Arg Leu Val Val Ser Gly Ser Ser
141      435      440      445
142 Asp Asn Thr Ile Arg Leu Trp Asp Ile Glu Cys Gly Ala Cys Leu Arg
143      450      455      460
144 Val Leu Glu Gly His Glu Glu Leu Val Arg Cys Ile Arg Phe Asp Asn
145 465      470      475      480
146 Lys Arg Ile Val Ser Gly Ala Tyr Asp Gly Lys Ile Lys Val Trp Asp
147      485      490      495
148 Leu Val Ala Ala Leu Asp Pro Arg Ala Pro Ala Gly Thr Leu Cys Leu
149      500      505      510
150 Arg Thr Leu Val Glu His Ser Gly Arg Val Phe Arg Leu Gln Phe Asp
151      515      520      525
152 Glu Phe Gln Ile Val Ser Ser Ser His Asp Asp Thr Ile Leu Ile Trp
153      530      535      540
154 Asp Phe Leu Asn Asp Pro Ala Ala Gln Ala Glu Pro Pro Arg Ser Pro
155 545      550      555      560
156 Ser Arg Thr Tyr Thr Ile Ser Arg
157      565
160 <210> SEQ ID NO: 3

```

## RAW SEQUENCE LISTING

DATE: 02/16/2007

PATENT APPLICATION: US/10/652,928A

TIME: 15:37:02

Input Set : E:\FINAL Revised Sequence listing.txt

Output Set: N:\CRF4\02162007\J652928A.raw

```

161 <211> LENGTH: 1476
162 <212> TYPE: DNA
163 <213> ORGANISM: Homo sapiens
165 <220> FEATURE:
166 <223> OTHER INFORMATION: Nucleotide sequence of human F-box protein FBP2
168 <400> SEQUENCE: 3
169 atggagagaa aggactttga gacatggcctt gataacattt ctgttacatt tcttttctctg 60
170 acggacttgc agaaaaatga aactctggat cacctgatta gtctgagtgg ggcagtcag 120
171 ctcaaggcatc tctccaataa cctagagact ctctcaagc gggacttcct caaactcctt 180
172 cccctggagc tcagttttta tttgttaaaa tggctcgatc ctcaagacttt actcacatgc 240
173 tgccctcgtct ctaaacagtg gaataagggtg ataagtgcct gtacagaggt gtggcagact 300
174 gcatgtaaaa atttgggctg gcagatagat gattctgttc aggacgcttt gcactggaag 360
175 aaggtttatt tgaaggctat tttgagaatg aagcaactgg aggaccatga agcctttgaa 420
176 acctcgtcac taattggaca cagtgccaga gtgtatgcac tttactacaa agatggactt 480
177 ctctgtacag ggtcagatga cttgtctgca aagctgtggg atgtgagcac agggcagtcg 540
178 gtttatggca tccagaccca cacttgtgca gcggtgaagt ttgatgaaca gaagcttgtg 600
179 acaggctcct ttgacaacac tgtggcttgc tgggaatgga gttccggagc caggaccag 660
180 cacttttcggg ggcacacggg ggcgggtattt agcgtggact acaatgatga actggatatc 720
181 ttggtgagcg gctctgcaga cttcactgtg aaagtatggg ctttatctgc tgggacatgc 780
182 ctgaacacac tcaccgggca cacggaatgg gtcaccaagg tagttttgca gaagtgcaaa 840
183 gtcaagtctc tcttgcacag tcctggagac tacatcctct taagtgcaga caaatatgag 900
184 attaagattt ggccaattgg gagagaaatc aactgtaagt gcttaaagac attgtctgtc 960
185 tctgaggata gaagtatctg cctgcagcca agacttcatt ttgatggcaa atacattgtc 1020
186 tgtagttcag cacttgggtc ctaccagtgg gactttgcca gttatgatat tctcagggtc 1080
187 atcaagactc ctgagatagc aaacttggcc ttgcttggct ttggagatat ctttgccttg 1140
188 ctgtttgaca accgctaect gtacatcatg gacttgcgga cagagagcct gattagtgcg 1200
189 tggcctctgc cagagtacag ggaatcaaag agaggctcaa gcttcctggc aggcgaacat 1260
190 cctggctgaa tggactggat gggcaccaatg acacgggctt ggtctttgcc accagcatgc 1320
191 ctgaccacag tattcacctg gtgttgtgga aggagcacgg ctgacaccat gagccaccac 1380
192 cgctgactga ctttgggtgc cggggctgcg ggttttgggt gcacctctgc ggcacgcgac 1440
193 tgcataaacc aaagttctca cctaattgta tcatca 1476
195 <210> SEQ ID NO: 4
196 <211> LENGTH: 422
197 <212> TYPE: PRT
198 <213> ORGANISM: Homo sapiens
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Amino Acid sequence of human F-box protein FBP2
204 <400> SEQUENCE: 4
205 Met Glu Arg Lys Asp Phe Glu Thr Trp Leu Asp Asn Ile Ser Val Thr
206 1 5 10 15
207 Phe Leu Ser Leu Thr Asp Leu Gln Lys Asn Glu Thr Leu Asp His Leu
208 20 25 30
209 Ile Ser Leu Ser Gly Ala Val Gln Leu Arg His Leu Ser Asn Asn Leu
210 35 40 45
211 Glu Thr Leu Leu Lys Arg Asp Phe Leu Lys Leu Leu Pro Leu Glu Leu
212 50 55 60
213 Ser Phe Tyr Leu Leu Lys Trp Leu Asp Pro Gln Thr Leu Leu Thr Cys
214 65 70 75 80
215 Cys Leu Val Ser Lys Gln Trp Asn Lys Val Ile Ser Ala Cys Thr Glu

```

## RAW SEQUENCE LISTING

DATE: 02/16/2007

PATENT APPLICATION: US/10/652,928A

TIME: 15:37:02

Input Set : E:\FINAL Revised Sequence listing.txt

Output Set: N:\CRF4\02162007\J652928A.raw

```

216          85          90          95
217 Val Trp Gln Thr Ala Cys Lys Asn Leu Gly Trp Gln Ile Asp Asp Ser
218          100          105          110
219 Val Gln Asp Ala Leu His Trp Lys Lys Val Tyr Leu Lys Ala Ile Leu
220          115          120          125
221 Arg Met Lys Gln Leu Glu Asp His Glu Ala Phe Glu Thr Ser Ser Leu
222          130          135          140
223 Ile Gly His Ser Ala Arg Val Tyr Ala Leu Tyr Tyr Lys Asp Gly Leu
224 145          150          155          160
225 Leu Cys Thr Gly Ser Asp Asp Leu Ser Ala Lys Leu Trp Asp Val Ser
226          165          170          175
227 Thr Gly Gln Cys Val Tyr Gly Ile Gln Thr His Thr Cys Ala Ala Val
228          180          185          190
229 Lys Phe Asp Glu Gln Lys Leu Val Thr Gly Ser Phe Asp Asn Thr Val
230          195          200          205
231 Ala Cys Trp Glu Trp Ser Ser Gly Ala Arg Thr Gln His Phe Arg Gly
232          210          215          220
233 His Thr Gly Ala Val Phe Ser Val Asp Tyr Asn Asp Glu Leu Asp Ile
234 225          230          235          240
235 Leu Val Ser Gly Ser Ala Asp Phe Thr Val Lys Val Trp Ala Leu Ser
236          245          250          255
237 Ala Gly Thr Cys Leu Asn Thr Leu Thr Gly His Thr Glu Trp Val Thr
238          260          265          270
239 Lys Val Val Leu Gln Lys Cys Lys Val Lys Ser Leu Leu His Ser Pro
240          275          280          285
241 Gly Asp Tyr Ile Leu Leu Ser Ala Asp Lys Tyr Glu Ile Lys Ile Trp
242          290          295          300
243 Pro Ile Gly Arg Glu Ile Asn Cys Lys Cys Leu Lys Thr Leu Ser Val
244 305          310          315          320
245 Ser Glu Asp Arg Ser Ile Cys Leu Gln Pro Arg Leu His Phe Asp Gly
246          325          330          335
247 Lys Tyr Ile Val Cys Ser Ser Ala Leu Gly Leu Tyr Gln Trp Asp Phe
248          340          345          350
249 Ala Ser Tyr Asp Ile Leu Arg Val Ile Lys Thr Pro Glu Ile Ala Asn
250          355          360          365
251 Leu Ala Leu Leu Gly Phe Gly Asp Ile Phe Ala Leu Leu Phe Asp Asn
252          370          375          380
253 Arg Tyr Leu Tyr Ile Met Asp Leu Arg Thr Glu Ser Leu Ile Ser Arg
254 385          390          395          400
255 Trp Pro Leu Pro Glu Tyr Arg Glu Ser Lys Arg Gly Ser Ser Phe Leu
256          405          410          415
257 Ala Gly Glu His Pro Gly
258          420
261 <210> SEQ ID NO: 5
262 <211> LENGTH: 1407
263 <212> TYPE: DNA
264 <213> ORGANISM: Homo sapiens
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Nucleotide sequence of human F-box protein FBP3a

```

**RAW SEQUENCE LISTING ERROR SUMMARY**  
**PATENT APPLICATION: US/10/652,928A**

**DATE: 02/16/2007**  
**TIME: 15:37:03**

**Input Set : E:\FINAL Revised Sequence listing.txt**  
**Output Set: N:\CRF4\02162007\J652928A.raw**

**Please Note:**

**Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.**

Seq#:26; Xaa Pos. 218,556,630  
Seq#:29; N Pos. 13,47,68,88,270  
Seq#:30; Xaa Pos. 15,22,28,89  
Seq#:37; N Pos. 45,329,332  
Seq#:38; Xaa Pos. 110,111  
Seq#:51; N Pos. 1733  
Seq#:52; Xaa Pos. 576,586  
Seq#:53; N Pos. 348  
Seq#:54; Xaa Pos. 150,309,340,374  
Seq#:59; N Pos. 471

**Invalid Line Length:**

**The rules require that a line not exceed 72 characters in length. This includes spaces.**

Seq#:63; Line(s) 2771  
Seq#:64; Line(s) 2788  
Seq#:65; Line(s) 2805  
Seq#:66; Line(s) 2822  
Seq#:67; Line(s) 2840  
Seq#:68; Line(s) 2857  
Seq#:69; Line(s) 2874  
Seq#:70; Line(s) 2892  
Seq#:71; Line(s) 2910  
Seq#:72; Line(s) 2928  
Seq#:73; Line(s) 2945  
Seq#:74; Line(s) 2963  
Seq#:75; Line(s) 2981  
Seq#:76; Line(s) 2999  
Seq#:77; Line(s) 3017  
Seq#:78; Line(s) 3038

## VERIFICATION SUMMARY

DATE: 02/16/2007

PATENT APPLICATION: US/10/652,928A

TIME: 15:37:03

Input Set : E:\FINAL Revised Sequence listing.txt

Output Set: N:\CRF4\02162007\J652928A.raw

L:10 M:283 W: Missing Blank Line separator, <130> field identifier  
L:1102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:208  
M:341 Repeated in SeqNo=26  
L:1342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
M:341 Repeated in SeqNo=29  
L:1362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
M:341 Repeated in SeqNo=30  
L:1570 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0  
M:341 Repeated in SeqNo=37  
L:1605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:96  
L:2220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:1680  
L:2307 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:52 after pos.:560  
M:341 Repeated in SeqNo=52  
L:2333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:300  
L:2391 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:144  
M:341 Repeated in SeqNo=54  
L:2680 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59 after pos.:420